

REMARKS

Claims 1-9, 12, 13 and 15-26 remain pending in the application. Claims 3 and 17 are amended. Entry of the present amendment, reconsideration of the rejection and allowance of the pending application in view of the following remarks are respectfully requested.

As an initial matter, Applicants wish to thank the Examiner for considering all of the documents cited in the Information Disclosure Statement filed on February 10, 2006.

In the Final Office Action, the Examiner rejected claims 1-4, 12 and 15-26 under 35 U.S.C. §103(a) as being unpatentable over Seth-Smith et al. (U.S. Patent No. 4,829,569) in view of Eda et al. (U.S. Patent No. 5,760,820) and Mankovitz (International Publication No. WO 98/48566). Applicants respectfully traverse the rejection for at least the following reasons.

Applicants' independent claim 1 recites a broadcast system which includes, inter alia, a transmission device including a multiplexer that multiplexes main contents data and sub contents data. The sub contents data includes an output form ID. The broadcast system also includes a reception device including a reconstructor. The reconstructor determines an output form corresponding to the output form ID and controls reconstruction. Controlling reconstruction include reconstructing the sub contents data and storing the main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data.

Applicants' independent claim 2 recites a transmission device which includes, inter alia, a multiplexer that multiplexes sub contents data. The sub contents data includes an output form ID that indicates an output form of the sub contents data. The output form instructs a reception

device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data.

Applicants' independent claim 3 recites a reception device which includes, inter alia, a reconstructor that controls reconstruction of sub contents data. The reconstructor determines an output form of the sub contents data and controls reconstruction. Controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data.

Applicants' independent claim 12 recites contents data in which sub contents data is multiplexed. The sub contents data include an output form ID corresponding to an output form of the sub contents data. The output form instructs a receiving device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data.

Applicants' independent claim 15 recites a broadcasting method in a broadcast system including a transmission device and a reception device. The method includes, inter alia, generating sub contents data, including an output form ID corresponding to an output form that instructs the reception device to switch from display of main contents data to display of sub contents data, or to switch from display of sub contents data to display of main contents data, determining the output form of the sub contents data corresponding to the output form ID, and controlling reconstruction. Controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for

switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data.

Applicants' independent claim 16 recites a method for generating a transport stream which includes, inter alia, generating sub contents data, including an output form ID that indicates an output form of the sub contents data. The output form instructs a receiving device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data.

Applicants' independent claim 17 recites a method for reconstructing a transport stream which includes, inter alia, receiving a transport stream, extracting sub contents data from the transport stream, acquiring an output form from the received sub contents data, determining the output form of sub contents data corresponding to an output form ID in the sub contents data, and controlling reconstruction. Controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data.

Seth-Smith et al. is directed to a subscription television system, and Eda et al. is directed towards a digital signal transmission system. At page 5 of the Final Office Action, the Examiner acknowledges that Seth-Smith et al. and Eda et al. fail to disclose a reconstructor which reconstructs sub contents data and stores main contents data in a memory, when a determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructs main contents data stored in a memory, when the determined output form

is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 1. However, the Examiner asserts that this feature is taught by Mankovitz. Applicants respectfully disagree.

Mankovitz discloses a television system which allows a viewer of a text-enhanced television program to pause the program at a particular frame, browse the enhancements at his or her leisure, and then resume viewing the program from that frame, without losing continuity of the video. See, e.g., the Abstract of Mankovitz.. Mankovitz's system is one in which television program-related information (PRI) is embedded in a vertical blanking interval of a television signal. See, e.g., page 1, lines 14-16 of Mankovitz.

Mankovitz discloses, at page 7, lines 13-25, that as a television signal is being received, the signal is sent to a Storage Device 52, which stores the incoming television signal in real-time. As the television signal is being stored, if a viewer wants to interact with the PRI, the viewer sends a command to a microprocessor 24 via a viewer input device 28, such as a remote controller. See page 5, lines 32-36 and page 7, lines 27-30 of Mankovitz. In response, the microprocessor 24 controls a VCR 17 to output the television signal to the Storage Device 52, which begins storing the television signal. See page 7, lines 33-35 of Mankovitz

When the viewer is done interacting with the PRI, the viewer sends a command to the microprocessor 24 to resume display of the television program. See page 8, lines 6-7 of Mankovitz. Instead of displaying the incoming television signal from a Tuner 11, the VCR 17 directs the delivery of the stored television signal data output from the Storage Device 52 for display on a TV 20. See page 8, lines 6-11 of Mankovitz.

In the Final Office Action, the Examiner asserts that Mankovitz's PRI data corresponds to Applicants' sub contents data, and Mankovitz's television program data corresponds to Applicants' main contents data.

Applicants respectfully submit Mankovitz's system does not extract an output form ID from sub contents data, determine an output form corresponding to the output form ID, and reconstruct the sub contents data (PRI data) and store the main contents data (television program data) in memory when the determined output form is a form for switching from display of main contents data to display of sub contents data, as recited in Applicants' independent claim 1. Applicants further submit that Mankovitz's system does not reconstruct the main contents data (television program data) stored in memory when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 1. Rather, Applicants submit that Mankovitz' system switches between reconstruction of sub contents data (PRI data) and main contents data (television program data) in response to a user entering a command via a remote controller.

Applicants further submit that Mankovitz fails to disclose or suggest a transmission device which transmits a transport stream including sub contents data, where the sub contents data includes an output form ID that indicates an output form which instructs a television receiver to switch from display of main contents data (television program data) to display of sub contents data (PRI data) or switch from display of sub contents data (PRI data) to display of main contents data (television program data), as recited in Applicants' independent claim 2. Rather, Applicants submit that Mankovitz's system switches between display of sub contents data (PRI data) and display of main contents data (television program data) in response to a user entering a command via a remote controller.

Thus, Applicants respectfully submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a broadcast system which includes a reception device including a reconstructor which controls reconstruction, where controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when a determined output form, corresponding to an output form ID included in the sub contents data, is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 1.

Applicants further submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a transmission device which includes a multiplexer that multiplexes sub contents data, where the sub contents data includes an output form ID that indicates an output form of the sub contents data and the output form instructs a reception device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data, as recited in Applicant's independent claim 2

Applicants also submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a reception device which includes a reconstructor that determines an output form of sub contents data and controls reconstruction, where controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory,

when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 3.

Applicants further submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest contents data in which sub contents data is multiplexed, where the sub contents data include an output form ID corresponding to an output form of the sub contents data, and the output form instructs a receiving device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 12.

Applicants also submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a broadcasting method which includes generating sub contents data, including an output form ID corresponding to an output form that instructs a reception device to switch from display of main contents data to display of sub contents data, or to switch from display of sub contents data to display of main contents data, determining the output form of the sub contents data corresponding to the output form ID, and controlling reconstruction, where controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 15.

Applicants also submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a method for generating a transport stream which includes generating sub contents data, including an output form ID that indicates an output form of the

sub contents data, where the output form instructs a receiving device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 16.

Applicants further submit that the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz fails to disclose or suggest a method for reconstructing a transport stream which includes receiving a transport stream, extracting sub contents data from the transport stream, acquiring an output form from the received sub contents data, determining the output form of sub contents data corresponding to an output form ID in the sub contents data, and controlling reconstruction, where controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 17.

For at least these reasons, Applicants respectfully submit that the inventions recited in Applicants' independent claims 1-3, 12 and 15-17 are not obvious in view of the asserted combination of Seth-Smith et al., Eda et al. and Mankovitz, and thus, respectfully request that the Examiner withdraw the 35 U.S.C. §103(a) rejection and allow claims 1-3, 12 and 15-17.

Applicants respectfully submit that dependent claims 4 and 18-26 are in condition for allowance at least in view of their dependency on claims 1-3.

Applicants respectfully submit that dependent claim 18 is allowable for at least the following additional reasons as well.



Dependent claim 18 recites that the sub contents data includes one of an output form ID and a script, that the reconstructor determines whether the received sub contents data includes an output form ID which corresponds to an output form ID stored in a reference table of the reception device, and that, if the sub contents data does not include an output form ID that corresponds to an output form ID stored in a reference table, the reception device presents the output contents based upon a script included in the sub contents data.

At col. 15, lines 56-60, Seth-Smith et al. discloses that a user presses an appropriate key or combination of keys if he wishes to see on his screen current program material being transmitted, or wishes to check his billing status. A decoder which includes a microprocessor 114 accesses an EEPROM 116 to determine what teletext page number provides the appropriate template for this information. See col. 15, lines 60-65 of Seth-Smith et al. The decoder then “grabs” the indicated page when a teletext header including the appropriate page number is received. See col. 16, lines 1-5 of Seth-Smith et al. If the “grabbed” page is a template page, subscriber-specific information stored in the EEPROM 16 is used to complete the template page. See col. 16, lines 40-60 of Seth-Smith et al.

At page 3 of the Final Office Action, the Examiner asserts that Seth-Smith’s “template page number” corresponds to Applicants’ claimed output form ID. Applicants respectfully submit that Seth-Smith’s decoder does not perform a process to determine whether received sub contents data includes an output form ID (template page number) which corresponds to an output form ID (template page number) stored in a reference table of a reception device, as recited in Applicants’ claim 18. Rather, Applicants submit that Seth-Smith’s decoder only receives sub contents data which include an output form ID (template page number) stored in a reference table of the EEPROM 116, as it only “grabs” pages having an predetermined output form ID

(template page number) listed in EEPROM 116. Applicants further submit that Seth-Smith's decoder does not present output contents based upon a script included in the sub contents data, if the sub contents data does not include an output form ID that corresponds to an output form ID stored in a reference table, as recited in Applicants' claim 18. Rather, as argued above, the only sub contents data received by Seth-Smith's decoder are sub contents data which include an output form ID (template page number) corresponding to an output form ID stored in the EEPROM 116.

Thus, for at least these additional reasons, Applicants respectfully submit that the 35 U.S.C. §103(a) rejection of claim 18 is improper, and respectfully request that the Examiner withdraw the rejection.

In the Final Office Action, the Examiner rejected claims 5-9 under 35 U.S.C. §103(a) as being unpatentable over Seth-Smith et al. in view of Eda et al. and Mankovitz, and further in view of Lemmons et al. (U.S. Patent No. 6,442,755). Applicants respectfully traverse the rejection for at least the following reasons.

Applicants respectfully submit that Lemmons et al., which is directed towards an interactive television program guide, fails to overcome the above-noted deficiencies of Seth-Smith et al., Eda et al. and Mankovitz. That is, Applicants submit that the combination of Seth-Smith et al., Eda et al., Mankovitz and Lemmons et al. fails to disclose or suggest a transmission device which includes a multiplexer that multiplexes sub contents data, where the sub contents data includes an output form ID that indicates an output form of the sub contents data and the output form instructs a reception device to switch from display of main contents data to display of sub contents data or switch from display of sub contents data to display of main contents data, as recited in Applicant's independent claim 2, and fails to disclose or suggest a reception device

which includes a reconstructor that determines an output form of sub contents data and controls reconstruction, where controlling reconstruction includes reconstructing sub contents data and storing main contents data in a memory, when the determined output form is a form for switching from display of main contents data to display of sub contents data, and reconstructing main contents data stored in a memory, when the determined output form is a form for switching from display of sub contents data to display of main contents data, as recited in Applicants' independent claim 3.

Applicants respectfully submit that dependent claims 5-9 are in condition for allowance at least in view of their dependency on claims 2 and 3, and thus, respectfully request that the Examiner withdraw the 35 U.S.C. §103(a) rejection.

Regarding independent claim 13, the Examiner indicated on the Office Action Summary Form (Form PTOL-326) that claim 13 was rejected, but did not address this claim in the body of the Final Office Action. Applicants respectfully submit that claim 13 is in condition for allowance at least for reasons similar to those set forth above with respect to claim 1, and respectfully request that the Examiner indicate such in the next Office communication. However, if the Examiner maintains the position that claim 13 is not presently in condition for allowance, Applicants respectfully request that the Examiner withdraw the finality of the previous Office Action, and issue a new Office Action which sets forth his reasons for rejecting claim 13.

Based on the above, it is respectfully submitted that this application is in condition for allowance, and the issuance of a Notice of Allowance is respectfully requested.

SUMMARY AND CONCLUSION

Applicants recognize that the current status of the present application is after-Final. However, Applicants respectfully submit that entry of the present amendment is proper under the current circumstances, as it is respectfully submitted that the present amendment does not raise new issues requiring further search and/or consideration. In this regard, Applicants submit that the amendments to claims 3 and 17 herein are merely to correct clerical errors.

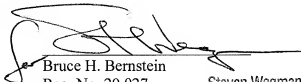
Entry and consideration of the present amendment, reconsideration of the outstanding Office Action, and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate. Applicants have made a sincere effort to place the present invention in condition for allowance and believe that they have done so.

Any amendments to the claims which have been made in this amendment, and which have not been specifically noted to overcome a rejection based upon the prior art, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should an extension of time be necessary to maintain the pendency of this application, the Commissioner is hereby authorized to charge any additional fee to Deposit Account No. 19-0089.

Should the Examiner have any questions or comments regarding this response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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